

Product Data Sheet  
Edition 07.2008  
Identification No. GA - 5



## KEMGRIP EP

Thixotropic 3 components solvent – free epoxy resin anchoring

### Description

**KEMGRIP EP** is a solvent free 3 - components epoxy based grouting to fix rebars and bolts into drilled or cast holes in concrete, with a remarkable vibration and impact resistance, a high pull and loading forces.

### Where to use

- High strength corrosion resistance anchoring of bolts and bars from 12-51 mm. diameter into con-crete, rock, masonry or brickwork where high speed of installation and early application of load in required.
- Permanent installation of reinforcement starter bars, foundation bolts, base plates, balustrades, bar-riers and safety fences, railway tracks, tie-back, anchors, reinforcement doweling abutments, ground anchors for towers, cranes, dock sills.

### Advantages

- \* Rapid strength gain..
- \* Vibration resistant.
- \* Corrosion resistant
- \* Economic.
- \* Can be placed underwater
- \* Non-sag in vertical and over head applications.
- \* High creep resistance under permanent load.
- \* Shrinkage free-curing

### Properties

Gel Time:

Temp°C.	Gel time min.	Minimum time before load Hours
23	60	24

### Compressive Strength:

After the minimum time before load the grout typically attains a compressive strength in excess of 20 N/mm<sup>2</sup> and an ultimate compressive strength of 50-60 N/mm<sup>2</sup>.

**Bond strength to concrete** : 6 -7 N/mm<sup>2</sup> at 23°C.

**Bond strength to steel**: 20 N/mm<sup>2</sup> at 20°C.

**Shear Strength**: 33 N/mm<sup>2</sup>

**Chemical Resistance**: The cured resin is resistance to fresh and salt water, petrol, oils, grease and most acids, alkalies and solvents.

**Specific Gravity**: 1.95 ± 0.1 at 23°C.

**Standards**: ASTM C881 : Type IV, Grade 3 Classes B,C.

### How to use

#### Hole preparation and formation:

- Optimum performance of KEMGRIP EP grouts requires rough surfaces, dust free holes. Use of rotary drills with air is recommended.
- Diamond drilled holes should be under-reamed unless necessary safety factors are incorporated.
- Cast holes should preferably be inverse dove tail configuration. If parallel sided holes are cast they should be rough to provide adequate keying.

#### Bar preparation:

All bars should preferably be degreased and all flaky rust removed.:

#### Mixing:

- A complete pack of binder (resin and hardener) and selected filler should be mixed in one operation. Mixing may be carried out manually or mechanically. When a smooth, even consistency is achieved the grout is ready for use and should be placed well within the gel time of the grout.
- Packs have been designed to produce practical and economic volumes of grout.
- Do not attempt to mix partial components.



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• The grout should be poured steadily into the prepared holes. The anchor bar is then pressed into the hole to the required depth. Slight agitation of the bar will assist in achieving a complete bond. The bar should be then left undisturbed in the required position until the resin is set.

**Application**

**Condition during application:**

At operating temperature above 40°C, the creep of KEMGRIP EP resin under load may become significant. Resin anchors should not be used where structural load bearing performance has to be maintained in anchors subjected to fire conditions.

**Cleaning:**

Any mixing drums, pumps, etc. should be cleaned using PROKEM special solvent within the pot life of the grout.

**Theoretical Coverage:**

2 kg/liter

**Packaging:**

The standard pack consists of a can of resin and hardener a plastic bag of pre-graded filler.

1 & 5 kg. pails (3components) A, B, C

**Storage:**

- KEMGRIP EP has a shelf life of 12 months at 20°C.
- KEMGRIP EP should be stored away from high temperatures.

## Health and Safety

- Confined area must be well ventilated and no naked flames allowed. Contact with the skin should be avoided as certain sensitive skins may be affected by contact with the resin. If contact occurs, the skin should be washed immediately with soap and water - not solvent.
- Use goggles - gloves and a breathing mask when applying.
- Eye splashes to be washed with plenty of water.
- If ingested seek medical advice.

## Additional Information

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range.